

Accounting for Inventories

Background

LEAs often maintain significant amounts of supplies such as classroom materials, maintenance supplies, and food for the food service program in a warehouse. These items are maintained in a warehouse to allow the LEA to obtain the needed supplies on an as-needed basis or to allow the LEA to take advantage of large quantity purchase discounts. LEAs using a warehouse to store supplies will establish (1) procedures to allow the sites, programs, or departments to requisition items from the warehouse; and (2) accounting procedures to charge the requisitioned goods to the requisitioning site, program, or department.

Fund Type

LEAs have the option of using the following funds to record the inventory:

Governmental Funds

1. The General Fund/County School Service Fund: This is the fund most commonly used to account for inventory in an LEA.
2. Adult Education Fund: Very large LEAs may also use this fund to maintain a separate inventory strictly for the use of the adult education program. If this fund is used, it is in addition to the General Fund.
3. Child Development Fund: Very large LEAs may also use this fund to maintain a separate inventory strictly for the use of the child development program. If this fund is used, it is in addition to the General Fund.
4. Cafeteria Fund: LEAs operating a food service program will typically record the food service inventory in this fund.

Proprietary Fund

Some LEAs use the Warehouse Revolving Fund to account for their inventory. This fund is an internal service fund and is accounted for on the full accrual basis of accounting. This fund is usually chosen if an LEA wants to account for the full cost of

operating the warehouse in a separate fund. LEAs using this fund may record the inventory for the food service program in this fund also.

LEAs using the Warehouse Revolving Fund will record the following in the fund:

1. The cost of the inventory.
2. The salaries and benefits of personnel working in the warehouse.
3. The cost of the land and building for the warehouse (for new acquisitions).
4. The cost of all other expenses for the warehouse (e.g., utilities, warehouse equipment, warehouse maintenance, and warehouse operation supplies).
5. Depreciation expense on buildings and equipment used for the warehouse. These items are initially recorded as assets and depreciated over the useful life of the item.

Typical Entries

When inventory is purchased, the following entry is recorded (this entry may be used in all funds):

General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-11-9X	9210 Stores 9110 Cash in County Treasury	\$25,496	\$25,496

This entry records the purchase of inventory in an asset account and reduces the cash account for the payment.

The same entry using the standardized account code structure (SACS), in this case using an unrestricted resource to purchase inventory, is recorded as follows:

General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-11-9X	01-0000-0-0000-0000-9320 Stores 01-0000-0-0000-0000-9110 Cash in County Treasury	\$25,496	\$25,496

This entry could also be made in funds 11 (Adult Education), 12 (Child Development), 13 or 61 (Cafeteria), and 66 (Warehouse Revolving Fund). Notice that Object 9320, Stores, has a different object number in SACS.

When site, program, or department staff requisitions items from the warehouse, the following entry is recorded in the Governmental Funds:

General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	4500 Other Supplies 9210 Stores	\$260	\$260

This entry reduces the inventory account and charges the cost of the goods to the site, program, or department. Object 4700, Food, would be used if food items were requisitioned for the food service program.

This entry using SACS is recorded as follows:

General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	01-0000-0-0000-8100-4300 Other Supplies 01-0000-0-0000-0000-9320 Stores	\$25,496	\$25,496

In SACS, for this example, Function 8100, Plant Maintenance and Operations, further defines the Object 4300, Supplies.

When the LEA uses the Warehouse Revolving Fund and items are requisitioned by site, program, or department staff, the following entries are recorded:

(a) Warehouse Revolving Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	9110 Cash in County Treasury	\$260	
	8639 All Other Sales		\$260
	4500 Other Supplies	\$260	
	9210 Stores		\$260

This entry reduces the inventory account and records the cost of goods sold.

(b) General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	4500 Other Supplies	\$260	
	9110 Cash in County Treasury		\$260

This entry charges the expenditure to the site, program, or department receiving the goods and reduces the cash account.

The same two transactions in SACS are as follows:

(a) Warehouse Revolving Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	66-0000-0-0000-0000-9110 Cash in County Treasury	\$260	
	66-0000-0-0000-0000-8639 All Other Sales		\$260
	66-0000-0-0000-6000-4300 Other Supplies	\$260	
	66-0000-0-0000-0000-9320 Stores		\$260

The Warehouse Revolving Fund uses the Enterprise function to record the cost of goods sold.

(b) General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	01-0000-0-0000-8100-4300 Other Supplies	\$260	
	01-0000-0-0000-0000-9110 Cash in County Treasury		\$260

The General Fund recognizes the cost of custodial supplies received and payment by cash.

Determining the Cost of Inventory

The cost of the merchandise debited to the Stores account at the time of the purchase includes the total cost of the merchandise, including sales tax, postage, freight, and other charges.

When the inventory is issued to a site, program, or department, there are several acceptable methods that may be used to cost the inventory. The software used by the LEA is programmed to cost the inventory by using one of these methods:

1. Last-in-first-out (LIFO): Under this method, the goods are costed using the latest invoice price of goods in inventory. If 50 items are issued from inventory and only 40 items were purchased on the last invoice (and 10 on the previous invoice), the cost will be computed using the last invoice and the next-to-last invoice.
2. First-in-first-out (FIFO): Under this method, the goods are costed using the oldest invoice price of goods in inventory. If 50 items are issued from inventory and only 40 were purchased on the oldest invoice, the next 10 from the next-to-oldest invoice will be used in the computation.

3. Weighted average: Under this method, the goods are costed using an average of the invoice prices of goods in the inventory. For example:

<i>Date of Purchase</i>	<i>Number of Items</i>	<i>Cost Per Item</i>	<i>Total Cost</i>
8-12-9X	400	\$3.00	\$1,200
10-2-9X	600	5.00	3,000
1-6-9X	<u>1,200</u>	<u>4.00</u>	<u>4,800</u>
Total	2,200	N/A	\$9,000

The weighted average for this item is $\frac{\$9,000}{2,200} = \4.09 per item

Commercial businesses may have tax reasons for using one inventory cost method over another; however, for LEAs, the weighted average method is probably the most appropriate since it smoothes out price fluctuations and results in a more consistent charge to the sites, programs, or departments.

Overhead

LEAs using the Warehouse Revolving Fund will include a charge for overhead in the price of the goods charged to the sites, programs, or department. LEAs may also want to add an overhead charge to the goods requisitioned if the inventory is maintained in other funds.

The following is an example of how to compute overhead in the Warehouse Revolving Fund:

1997-98 Warehouse Revolving Fund Costs

Salaries and Benefits	\$450,000
Rent	45,000
Utilities	32,000
Other Expenses	<u>73,000</u>
Total Expenses	\$600,000

During 1997-98, a total of \$5,000,000 was requisitioned from the warehouse. Using the 1997-98 information, the overhead rate for 1998-99 would be:

$$\frac{\text{Total Warehouse Cost}}{\text{Total Amount Requisitioned}} = \frac{\$ 600,000}{\$5,000,000} = 12\%$$

If this method of computing overhead was used, an additional 12% would be added to the cost of all items requisitioned out of the warehouse in the 1998-99 year. This same method, using the estimated 1998-99 costs and amounts requisitioned, could also be used. The same method could also be used to compute an overhead charge for the other funds.

If the LEA is using the Warehouse Revolving Fund, the following entries are made to record the overhead charge.

(a) Warehouse Revolving Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	9110 Cash in County Treasury 8639 All Other Sales	\$31.20	\$31.20

This entry increases the cash account and records revenue equal to the amount of the overhead charge (\$260 x 12% overhead). If the computation of the overhead was reasonable, at the end of the year, the amount recorded in account 8639 should equal or exceed the amount of the total costs in the Warehouse Revolving Fund.

(b) General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	4500 Other Supplies 9110 Cash in County Treasury	\$31.20	\$31.20

This entry increases the charge to the site, program, or department receiving the goods and reduces the cash account.

The same two entries describing the charging of overhead between the Warehouse Revolving Fund and a governmental user fund are as follows in SACS:

(a) Warehouse Revolving Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	66-0000-0-0000-0000-9110 Cash in County Treasury 66-0000-0-0000-0000-8639 All Other Sales	\$31.20	\$31.20

(b) General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	01-0000-0-0000-8100-9110 Other Supplies 01-0000-0-0000-0000-8639 Cash in County Treasury	\$31.20	\$31.20

If the LEA is using the General Fund to account for inventory and charges overhead in addition to the cost of the requisitioned goods, the following entry is recorded:

General Fund

<i>Date</i>	<i>Account</i>	<i>Debit</i>	<i>Credit</i>
9-30-9X	4500 Other Supplies 45XX Overhead Clearing Account	\$31.20	\$31.20

This entry increases the charge to the site, program, or department receiving the goods. The program accumulating the costs of warehousing is reduced by a type of contra-account.

This entry in SACS is as follows:

General Fund

<i>Date</i>	<i>Account</i>		<i>Debit</i>	<i>Credit</i>
9-30-9X	01-0000-0-0000-8100-4300	Other Supplies	\$31.20	
	01-0000-0-0000-0000-43XX	Overhead Clearing Account		\$31.20

The General Fund has collected warehousing costs in Function 7540, Warehousing and Distribution. The contra-account Object 43Y-X transfers the overhead costs to other functions.

Physical Inventory

The LEA staff should take a physical count of the inventory at least once a year. The purpose of the physical count is to confirm that the amount recorded on the LEA's books is correct or to adjust the amount on the books to the actual amount. If a physical count is only taken once a year, this count is usually made close to the end of the year to coincide with the date of the LEA's financial statements. Once the count is complete, an entry must be made to adjust the books to the physical count. If the physical count is lower than the amount recorded on the books, the following entry is recorded:

General Fund

<i>Date</i>	<i>Account</i>		<i>Debit</i>	<i>Credit</i>
9-30-9X	4500	Other Supplies Stores	\$563	
	9210			\$563

This entry increases the charge to the site, program, or department receiving the goods. If the physical count is higher than the amount recorded on the books, the debit is to Object 9210 and the credit is to account 4500.

LEAs may charge the amount of the adjustment to one program or to all user programs (or sites or departments) based on the percentage of requisitions made by that program during the year. This is usually done if the amount of the adjustment is significant.

The same entry in SACS is as follows:

<i>Date</i>	<i>Account</i>		<i>Debit</i>	<i>Credit</i>
9-30-9X	01-6500-0-5001-1000-4300	Instructional Supplies	\$350	
	01-7250-0-1110-1000-4300	Instructional Supplies	\$100	
	01-0000-0-0000-7200-4300	District Office Supplies	\$113	
	01-0000-0-0000-0000-9320	Stores		\$563

In this example, Special Education (Resource 6500) and School-Based Coordination Program (Resource 7250) are charged for a portion of the inventory shortage in instructional supplies. The district office is charged with a shortage in office supplies. Stores is reduced to reflect the actual count.